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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/839,851	04/20/2001	Donald C.D. Chang	PD-200277A	3026
20991	7590	04/04/2005	EXAMINER	
THE DIRECTV GROUP INC			NGUYEN, SON XUAN	
PATENT DOCKET ADMINISTRATION RE/R11/A109				
P O BOX 956			ART UNIT	PAPER NUMBER
EL SEGUNDO, CA 90245-0956			2664	

DATE MAILED: 04/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/839,851

Applicant(s) 

CHANG ET AL.

Examiner

SON X. NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 2/4/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18-27 is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☒ Claim(s) 8-17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 2/4/05 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Specification*

1. Claim 7 is objected to because of the following informalities:

“wherein multiple dynamic ... Internet protocol.” should be changed to “wherein multiple dynamic wireless linkages are established between the user terminal and a communications network based on the Internet protocol.”.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title; if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robert (U.S 6,411,607) in view of Zehavi (U.S 5,757,767).

Regarding claims 1, Robert disclose a method of data transfer comprising the steps of: establishing single dynamic wireless linkages (**linkages 30 of Figure 1**) between a communications network based on an Internet protocol (Internet back channel system 10 of Figure 1) and a user terminal via a plurality of geo-stationary

satellites **(satellite 20 of Figure 1)**; and transferring datagrams conforming to the Internet protocol between the user terminal and the communications network over single wireless linkages (see lines 3-9 of column 6).

Robert, however, fails to disclose multiple wireless linkages between the user terminal and plurality of satellites.

Zehavi teaches multiple wireless linkages between the user terminal and plurality of satellites **(See linkages 46, 48, 50 and 52 of Fig. 1)**.

It would have been obvious to one ordinary skill in the art at the time the invention was made to modify Robert's method to incorporate a setup where multiple wireless linkages are used between the user terminal and plurality of satellites, the motivation being that using multiple wireless linkages to ensure uninterrupted communications between user terminal and information sources.

Regarding claim 2, Robert discloses the communications network is the global Internet **(Figure 1 shows the network is IP network)**.

Regarding claim 3, Robert discloses multiple wireless linkages are coupled to the communications network by RF communications base terminals connected to Internet nodes **(Linkages 3, Satellite disk 31, Satellite receiver 32 and Router 36 of Figure 1)**.

Regarding claim 4, 5 and 6, Robert discloses user terminal assembles datagrams from data frames and fragments datagrams to data frames **(Satellite receiver 32, Ethernet/Router card 34 and Modulator 26 of Figure 1)**.

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Regarding claim 7, Robert discloses a communications system comprising: a single of geo-stationary satellites **(Satellite 20 of Figure 1)**; a communications network based on an Internet protocol **(Internet back channel system 10 of Figure 1)**; a plurality of Internet nodes **(Router 36 and 22 of Figure 1)** coupled to the communications network; a plurality of communications base terminals **(Satellite disk 31 and Satellite receiver 32 of Figure 1)** coupled to the Internet nodes and to the plurality of geostationary satellites; and a user terminal coupled to the plurality of geostationary satellites **(Satellite 20 of Figure 1)**, wherein single dynamic wireless linkages are established between the communications network based on the Internet protocol **(linkages 30 of Figure 1)**.

Robert, however, fails to disclose multiple wireless linkages between the user terminal and plurality of satellites.

Zehavi teaches multiple wireless linkages between the user terminal and plurality of satellites **(See linkages 46, 48, 50, 52 and satellites 18, 20 of Fig. 1)**.

It would have been obvious to one ordinary skill in the art at the time the invention was made to modify Robert's method to incorporate a setup where multiple wireless linkages are used between the user terminal and plurality of satellites, the motivation being that using multiple wireless linkages to ensure uninterrupted communications between user terminal and information sources.

***Allowable Subject Matter***

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4. Claims 8-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Claims 18-27 are allowed.

6. The following is an examiner's statement of reasons for allowance:

Claims 18 is allowable over the prior art of record since the cited references taken individually or in combination fails to particularly disclose **a multiple beam antenna; a plurality of amplifiers coupled to the multiple beam antenna; a plurality of bandpass filters coupled to the plurality of amplifiers; a modem coupled to the plurality of bandpass filters; a router & hub coupled to the modem; a transport layer coupled to the router & hub; and an estimation processor coupled to the router & hub.** It is noted that the closest prior art, Robert (U.S 6,411,607) in view of Zehavi (U.S 5,757,767) shows system may include an Internet or telecommunications backchannel. The receiver becomes router enabled by means of a removable insertion Ethernet/Router insertion card inserted into a slot in the receiver, although the transmission system may be used to simultaneously transmit a variety of other services through the receiver by use of other service slots in the receiver. However, Robert et al. fails to disclose or render obvious the above underlined limitations as claimed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a) Robert et al. (U.S 6,160,797), Satellite receiver/router, system, and method of use.

b) Edgar et al. (U.S 6,266,540), Control interface protocol for the telephone sets for a satellite telephone system.

c) Learner et al. (U.S 6,775,251), Satellite communication system providing multi-gateway diversity and improved satellite loading.

d) Ronald F. Rosati (U.S 6,041,233), Method and system for providing global variable data rate connectivity in a satellite-based communications networks.

e) Gilbert Dinkins (U.S 5,633,872), Interactive radio.

f) Ephraim Zehavi (U.S 5,757,767) Method and apparatus for joint transmission of multiple data signals in spread spectrum communication systems.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SON X. NGUYEN whose telephone number is 571-272-6048. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ken Vanderpuye can be reached on 571-272-3078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

3/22/05  
Son X. Nguyen



WELLINGTON CHIN  
SUPERVISORY PATENT EXAMINER